

A black and white photograph of a forest. In the foreground, several tall, thin, light-colored tree trunks stand vertically. The background is filled with a dense canopy of trees, including some darker, more conical evergreens. The overall scene is a natural, wooded area.

# GLOSSARY

## -A-

**Accelerated Erosion:** Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can lead to a permanent reduction in plant productivity.

**Active Preference:** That portion of the total grazing preference for which grazing use may be authorized.

**Activity Plan:** Site-specific plan which precedes actual development. This is the most detailed level of BLM planning, and is also referred to as project level or implementation level planning.

**Actual Use:** The amount of animal unit months consumed by livestock based on the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks by the BLM.

**Adit:** Horizontal, or nearly horizontal, passage from the surface by which a mine is worked or dewatered.

**Administrative Unit:** Field Office, Resource Area, District or State.

**Air Quality:** Refers to standards for various classes of land as designated by the Clean Air Act of 1978.

**Allotment:** An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

**Allotment Categorization:** Grazing allotments and rangeland areas used for livestock grazing are assigned to an allotment category during resource management planning. Allotment categorization is used to establish priorities for distributing available funds and personnel during plan implementation to achieve cost-effective improvement of rangeland resources. Categorization is also used to organize allotments into similar groups for purposes of developing multiple use prescriptions, analyzing site-specific and cumulative impacts, and determining trade-offs.

**Allotment Management Plan:** A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

**Alluvial Fan:** A low, outspread, relatively flat to gently sloping mass of loose rock material deposited by a stream where it flows from a narrow mountain valley onto a plain or broad valley.

**Alluvium:** Any sediment deposited by flowing water, as in a river bed, floodplain, or delta.

**Amendment:** The process for considering or making changes in the terms, conditions, and decisions of approved Resource Management Plans or Management Framework Plans using the prescribed provisions for resource management planning appropriate to the proposed action or circumstances. Usually only one or two issues are considered that involve only a portion of the planning area.

**Analysis of the Management Situation:** A comprehensive documentation of the present conditions of the resources, current management guidance, and opportunities for change.

**Animal Unit Month:** A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for 1 month. Approximately 800 pounds of forage.

**Appeal:** Application for review by a higher court.

**Aquatic:** Living or growing in or on the water.

**Aquifer:** A water-bearing bed or layer of permeable rock, sand, or gravel capable of yielding large amounts of water.

**Archaeological resource/remains:** A term with legal definition and application, meaning any material remains of human life or activities that are at least 100 years of age, and that are of archaeological interest.

**Area of Critical Environmental Concern:** Areas within the public lands where special management attention is required to: (1) protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or (2) protect life and safety from natural hazards.

**Arid:** A condition of a region where precipitation is insufficient to support any but drought-adapted vegetation.

**Armoring:** Placement of protective material for the primary purpose of reducing sediment into streams or other water bodies.

**Aspect:** (1) the visual first impression of vegetation at a particular time or seen from a specific point. (2) The predominant direction of the slope of the land.

**Assessment:** The act of evaluating and interpreting data and information for a defined purpose.

**Authorized Officer:** The Federal employee who has the delegated authority to make a specific decision.

**Authorized Use:** Uses of public land that may be authorized include agriculture development, residential use (under certain conditions), business, industrial, and commercial uses, advertising; research projects, State National Guard maneuvers, and motion picture filming. Recreational concessions are considered business uses and may be authorized by lease. Timber harvest, livestock grazing, mineral extraction and special recreation events, among other uses, are authorized under other regulations and not under Section 302 of FLPMA.

**Avoidance Areas:** Areas with sensitive resource values where rights-of-way would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area.

-B-

**Back Country Byways:** Vehicle routes that traverse scenic corridors utilizing secondary or back country road systems. National back country byways are designated by the type of road and vehicle needed to travel the byway.

**Backfill:** Material used to replace soil and earth removed during mining.

**Backfilling:** The replacement of soil and earth removed during mining.

**Basin:** A depressed area having no surface outlet (topographic basin); a physiographic feature or subsurface structure that is capable of collecting, storing, or discharging water by reason of its shape and the characteristics of its confining material (water); a depression in the earth's surface, the lowest part often filled by a lake or pond (lake basin); a part of a river or canal widened (drainage, river, stream basin).

**Best Management Practices:** A suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. Best management practices are often developed in conjunction with land use plans, but they are not considered a land use plan decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory.

**Big Game:** Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

**Biodiversity:** The diversity of living organisms considered at all levels of organization including genetics, species, and higher taxonomic levels, and the variety of habitats and ecosystems, as well as the processes occurring therein.

**Biological Assessment:** The gathering and evaluation of information on proposed endangered and threatened species and critical habitat and proposed critical habitat. Required when a management action potentially conflicts with endangered or threatened species, the biological assessment is the way federal agencies enter into formal consultation with the Fish and Wildlife Service and describe a proposed action and the consequences to the species the action would affect.

**Biomass:** Vegetative material leftover from stand treatments. This term usually refers to such material that can be gathered and transported to cogeneration plants, and there utilized for production of electricity.

**Board feet:** A unit of solid wood one foot square and one inch thick.

**Bole:** The main stem(s) of a timber species tree.

**Bond, or Corporate Guarantee:** The use of corporate assets as part or all of the financial assurance for reclamation.

**Browse:** To browse (verb) is to graze a plant; also, browse (noun) is the tender shoots, twigs and leaves of trees and shrubs often used as food by livestock and wildlife.

**Buffer zone (strip):** A protective area adjacent to an area of concern requiring special attention or protection. In contrast to riparian zones which are ecological units, buffer strips can be designed to meet varying management concerns.

**Bunchgrass:** Individual grasses that have the characteristic growth habit of forming a "bunch" as opposed to having stolens or rhizomes or single annual habit.

-C-

**Cambrian:** The oldest of the periods of the Paleozoic Era; also the system of strata deposited during that period.

**Candidate species:** Any species included in the Federal Register notice of review that are being considered for listing as threatened or endangered by the U.S. Fish and Wildlife Service.

**Canopy:** The uppermost layer consisting of the crowns of trees or shrubs in a forest or woodland.

**Carrying capacity:** The maximum stocking rate possible without damaging vegetation or related resources.

**Casual Use:** Activities that only negligibly disturb federal lands and resources. For mining activities, casual use generally includes the collecting of geochemical, rock, soil, or mineral specimens using hand tools, hand panning, and nonmotorized sluicing. It also generally includes use of

metal detectors, gold spears, and other battery-operated devices for sensing the presence of minerals, and hand and battery-operated drywashers. Casual use does not include use of mechanized earth-moving equipment, truck-mounted drilling equipment, suction dredges, motorized vehicles in areas designated as closed to off-road vehicles, chemicals, or explosives. It also does not include occupancy or operations where the cumulative effects of the activities result in more than negligible disturbance.

**Categorical Exclusion:** A category of actions (identified in agency guidance) that do not individually or cumulatively have a significant effect on the human environment, and for which neither an environmental assessment nor an Environmental Impact Statement is required.

**Cave Resource:** Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge, including any cave resource therein, that is large enough to permit a person to enter, whether the entrance is excavated or naturally formed. Also included is any natural pit or sinkhole.

**Cenozoic:** The most recent era of geologic history (65 million years ago until the present) during which the world's modern landforms, animals, and plants came into being.

**Channel:** An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

**Clean Air Act:** Federal legislation governing air pollution.

**Climax:** The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition.

**Climax Vegetation:** The final vegetation community and highest ecological development of a plant community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces.

**Closed:** Generally denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs.

**Closed Area or Trail:** Designated areas and trails where the use of off-road vehicles are permanently or temporarily prohibited. The use of off-road vehicles in closed areas may be allowed only with the approval of the authorized officer.

**Closed Road:** A road or segment which is restricted from certain types of use during certain seasons of the year. The prohibited use and the time period of closure is specified.

**Coal:** A readily combustible rock containing more than 50 percent weight and more than 70 percent by volume of carbonaceous material including inherent moisture, formed from compaction and induration of variously altered plant remains similar to those in peat. Differences in the kinds of plant materials (type), in degree of metamorphism (rank), and in the range of impurity (grade) are characteristic of coal and are used in classification.

**Code of Federal Regulations (CFR):** The official, legal tabulation or regulations directing federal government activities.

**Collaboration:** A cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands. This may or may not involve an agency as a cooperating agency.

**Colluvium:** A general term applied to loose and incoherent deposits, usually at the foot of a slope or cliff and brought there chiefly by gravity. Talus and cliff debris are included in such deposits.

**Commercial Forest Land:** Forest land which is producing, or has a site capable of producing, at least 20 cubic feet/acre/year of a commercial tree species.

**Common Variety Minerals:** Stone, gravel, pumice, pumicite, and cinders that, though possibly having value for trade, manufacture, the sciences, or the mechanical or ornamental arts, do not have a distinct, special value for such use beyond normal uses. On the public lands such minerals are considered saleable and are disposed of by sales or by special permits to local governments.

**Community:** An assemblage of plant and animal populations in a common spatial arrangement.

**Composition (of forest vegetation):** The proportion of each tree species in a stand, expressed as a percentage of the total number, basal area, or volume of all tree species in the stand.

**Conformance:** That a proposed action shall be specifically provided for in the land use plan or, if not specifically mentioned, shall be clearly consistent with the goals, objectives, or standards of the approved land use plan.

**Conifer:** A tree of the order Coniferae with cones and needle-shaped or scalelike leaves.

**Coniferous:** Pertaining to conifers, which bear woody cones containing naked seeds.

**Conservation Agreement:** A formal signed agreement between the U.S. Fish and Wildlife Service or National Ma-

rine Fisheries Service and other parties that implements specific actions, activities, or programs designed to eliminate or reduce threats or otherwise improve the status of a species. CA's can be developed at a State, regional, or national level and generally include multiple agencies at both the State and Federal level, as well as tribes. Depending on the types of commitments the BLM makes in a CA and the level of signatory authority, plan revisions or amendments may be required prior to signing the CA, or subsequently in order to implement the CA.

**Conservation Strategy:** A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM Sensitive species or that have been determined by the Fish and Wildlife Service or National Marine Fisheries Service to be Federal candidates under the Endangered Species Act.

**Consistency:** The proposed land use plan does not conflict with officially approved plans, programs, and policies of tribes, other Federal agencies, and State, and local governments to the extent practical within Federal law, regulation, and policy.

**Contiguous:** lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

**Cooperating Agency:** Assists the lead Federal agency in developing an Environmental Analysis or Environmental Impact Statement. The Council on Environmental Quality regulations implementing NEPA define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA. Any tribe or Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

**Corridor:** A wide strip of land within which a proposed linear facility could be located.

**Council on Environmental Quality:**

**Cover:** Any form of environmental protection that helps an animal stay alive (mainly shelter from weather and concealment from predators).

**Cover Type:** The present vegetation composition of an area, described by the dominant plant species.

**Critical Habitat:** An area occupied by a threatened or endangered species "on which are found those physical and biological features (1) essential to the conservation of the

species, and (2) which may require special management considerations or protection".

**Cultural resource/cultural property:** a definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) or traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through the system of identifying, protecting, and utilizing for public benefit.

**Cultural resource inventory classes:**

- **Class I – Existing data inventory:** a study of published and unpublished documents, records, files, registers, and other sources, resulting in analysis and synthesis of all reasonably available data. Class I inventories encompass prehistoric, historic, and ethnological/sociological elements, and are in large part chronicles of past land uses. They may have major relevance to current land use decisions.
- **Class II – Sampling field inventory:** a statistically based sample survey designed to help characterize the probable density, diversity, and distribution of archaeological properties in a large area by interpreting the results of surveying limited and discontinuous portions of the target area.
- **Class III – Intensive field inventory:** a continuous, intensive survey of an entire target area, aimed at locating and recording all archaeological properties that have surface indications, by walking close-interval parallel transects (generally at 30 m intervals) until the area has been thoroughly examined.

**Cumulative Impact:** The impact on the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Cunits:** A unit of volume equivalent to 100 cubic feet of solid wood.

-D-

**Deciduous:** Pertaining to plants that shed all their leaves every year in a certain season.

**Denning Habitat:** Habitat used during parturition and rearing of young until they are mobile. The common component appears to be large amounts of coarse woody debris, either down logs or root wads. Coarse woody debris pro-

vides escape and thermal cover for kittens. Denning habitat may be found either in older mature forest of conifer or mixed conifer/deciduous types, or in regenerating stands (>20 years since disturbance). Denning habitat must be located within daily travel distance of foraging habitat (typical maximum daily distance for females is 3-6 miles).

**Designated Roads and Trails:** Specific roads and trails where some type of motorized vehicle use is allowed either seasonally or year-long.

**Development Well:** A well drilled within the known or proven productive area of an oil field with the expectation of producing oil or gas from the producing reservoir.

**Discharge (Water):** The rate of flow or volume of water flowing in a stream at a given place or within a given period of time.

**Dispersed or Extensive Recreation:** Recreation activities of an unstructured type which are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

**Disturbance:** Events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused disturbances include actions such as timber harvest, fire, livestock grazing, road construction, and the introduction of exotic species.

**Distribution Line:** An electric power line operating at a voltage of less than 69 kilovolts.

**Diversity:** The relative abundance of wildlife species, plant species, communities, habitats, or habitat features per unit of area.

**Drainage:** The removal of excess water from land by surface or subsurface flow.

**Drawdown, Ground Water:** A lowering of the ground water surface caused by pumping, measured as the difference between the original ground water level and the level after a period of pumping.

**Drilling:** The operation of boring a hole in the earth, usually for the purpose of finding and removing subsurface formation fluids such as oil and gas.

**Dry Hole:** Any well incapable of producing oil or gas in commercial quantities. A dry hole may produce water, gas, or even oil, but not enough to justify production.

-E-

**Easement:** A right afforded a person or agency to make limited use of another's real property for access or other purposes.

**Ecosystem:** A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

**Emergent Vegetation:** Aquatic plant species that are rooted in wetlands but extend above the water's surface.

**Endangered Species:** A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act.

**Entry:** An application to acquire title to public lands.

**Environmental Assessment:** A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

**Environmental Impact Statement:** A detailed written statement required by the National Environmental Policy Act when an agency proposes a major federal action significantly affecting the quality of the human environment.

**Erosion:** The wearing away of the land surface by running water, wind, ice, or other geological agents.

**Exception (oil and gas):** A one-time exemption to a lease stipulation. Exceptions are determined on a case-by-case basis.

**Exclusion Areas:** Areas with sensitive resource values where rights-of-way would be prohibited.

**Exploration:** The work of investigating a mineral deposit to determine by geological surveys, geophysical surveys, geochemical surveys, boreholes, pits, and underground workings if it is feasible to mine.

**Extensive Recreation Management Area:** Areas where significant recreation opportunities and problems are limited and explicit recreation management is not required. Minimal management actions related to the Bureau's stewardship responsibilities are adequate in these areas.

-F-

**Fan:** An accumulation of debris brought down by a stream descending through a steep ravine and debouching in the

plain beneath, where the detrital material spreads out in the shape of a fan, forming a section of a very low cone.

Federal Land Policy and Management Act of 1976: Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

Federal Register: A daily publication that reports Presidential and Federal Agency documents.

Fire-dependent ecosystems: Ecosystems in which recurring disturbances by fire are essential to ecosystem function.

Fire Management Plan: A strategic plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan; the plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

Fire Preparedness: Activities that lead to a safe, efficient, and cost-effective fire management program in support of land and resource management objectives through appropriate planning and coordination.

Fire Regimes: periodicity and pattern of naturally occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity, and areal extent (Tande 1980).

Fishery: Habitat that supports the propagation and maintenance of fish.

Flood Plain: The relatively flat area or lowlands adjoining a body of standing or flowing water which has been or might be covered by floodwater.

Fluvial: Pertaining to streams or produced by stream action.

Forage: All browse and herbaceous foods available to grazing animals, which may be grazed or harvested for feeding.

Forb: A herbaceous plant that is not a grass, sedge, or rush.

Forest Health treatments: Treatments that restore forest ecosystems to a condition that sustains their complexity while providing for human needs.

Forest Land: Land that is now, or has the potential of being, at least 10 percent stocked by forest trees (based on crown closure) or 16.7 percent stocked (based on tree stocking).

Formation: A body of rock identified by lithic characteristics and stratigraphic position; it is prevailing, but not necessarily

tabular, and is mappable at the earth's surface or traceable in the subsurface.

Fossil: Mineralized or petrified form from a past geologic age, especially from previously living things.

Fragile Soil: A soil that is especially vulnerable to erosion or deterioration due to its physical characteristics and/or location. Disturbance to the surface or the vegetative cover can initiate a rapid cycle of loss and destruction of soil material, structure, and ability to sustain a biotic community.

Free-flowing River: Existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.

Fuels:

Fuel loading: The weight of fuels in a given area, usually expressed in tons per acre, pounds per acre, or kilograms per square meter.

-G-

Geographic Information System (GIS): A computer system capable of storing, analyzing, and displaying data and describing places on the earth's surface.

Geophysical Exploration: The use of geophysical instruments and methods to determine subsurface conditions by analyzing such properties as specific gravity, electrical conductivity, or magnetic susceptibility.

Goal: A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established time frames for achievement.

Grazing System: The manipulation of livestock grazing to accomplish a desired result.

Groundwater: Water contained in pore spaces of consolidated and unconsolidated surface material.

Guidelines: Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as best management practices. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory.

-H-

Habitat: A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space. The complete suite of biotic and abiotic components of the environment where an animal lives.

**Heap:** A large, engineered pile of ore over which chemical agents such as cyanide are sprinkled in extracting metals by heap leaching.

**Heap Leaching:** A low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. This method is generally used on low-grade ores.

**Heavy Metal:** Any of the metals that react readily with dithizone, including zinc, copper, cobalt, lead, bismuth, gold, cadmium, iron, manganese, nickel, tantalum, tellurium, platinum, and silver.

**Herbaceous:** Pertaining to or characteristic of an herb (fleshy-stem plant) as distinguished from the woody tissue of shrubs and trees.

**Highwall:** The unexcavated face of exposed overburden and ore in an open pit mine.

**Historic:** Period wherein nonnative cultural activities took place, based primarily upon European roots, having no origin in the traditional Native American culture(s).

**Historic property or historic resource:** “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. The term includes, for purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term ‘eligible for inclusion in the National Register’ includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria” {quoted from 36 CFR 900.2(e)}.

**Home Range:** The area in which an animal travels in the scope of natural activities.

**Horizon (soil):** A layer of soil or soil material roughly parallel to the land surface and differing from adjoining genetically related layers in physical, chemical, and biological properties or characteristics, such as color, structure, and texture.

**Hummock:** A low, rounded hill, knoll, hillock; a tract of wooded land higher than a nearby swamp or marsh.

**Hydrologic Condition:** The current state of the processes controlling the yield, timing, and quality of water in a watershed. Each physical and biologic process that regulates or influences streamflow and ground-water character has a range of variability associated with the rate or magnitude of energy and mass exchange. At any point in time, each of these processes can be defined by their current rate or magnitude relative to the range of variability associated with

each process. Integration of all processes at one time represents hydrologic condition.

**Hydrologic Unit:** A level of a hierarchical system to describe geographic areas. Hydrologic units are used for the collection and organization of hydrologic data.

**Hydrophytic:** Water-loving; ability to grow in water or saturated soils.

-I-

**Igneous Rock:** Rock, such as granite and basalt, that has solidified from a molten or partially molten state.

**Impact:** A modification of the existing environment caused by an action (such as construction or operation of facilities).

**Impacts (or Effects):** Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

**Implementation Decisions:** Decisions that take action to implement land use plan decisions. They are generally appealable to Interior Board of Land Appeals.

**Implementation Plan:** A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with “activity” plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.

**Indian tribe:** Any Indian group in the conterminous United States that the Secretary of the Interior recognizes as possessing tribal status.

**Indicator (Species):** A species of animal or plant whose presence is a fairly certain indication of a particular set of environmental conditions. Indicator species serve to show the effects of development actions on the environment.

**Indirect effects:** Secondary effects that occur in locations other than the initial action or later in time.

**Infiltration:** The downward entry of water into the soil or other material.

**Initial (fire) Attack:** An aggressive fire suppression action consistent with firefighter and public safety and values to be protected.

**Interdisciplinary Team:** A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more discipline or Bureau program interest.

**Interim Management Policy:** Policy that guides management of the BLMs Wilderness Study Areas. The policy balances the various uses of Wilderness Study Areas with the requirement to protect the lands wilderness values.

**Interior Board of Land Appeals:** The Department of the Interior, Office of Hearings and Appeals board that acts for the Secretary of the Interior in responding to appeals of decisions on the use and disposition of public lands and resources. Because the Interior Board of Land Appeals acts for and on behalf of the Secretary of the Interior, its decisions usually represent the Department's final decision but are subject to the courts.

**Intermittent Stream:** A stream which occasionally is dry or reduced to pool stage.

**Invasive Species:** Organisms that have been introduced into an environment where they did not evolve. Executive Order 13112 focuses on organism whose presence is likely to cause economic harm, environmental harm, or harms to human health.

**Inversion:** The state of the atmosphere in which a layer of cool air is trapped near the earth's surface by an overlying layer of warm air so that the lower layer cannot rise. Serious air pollution problems may result from air pollutants being emitted into the limited mixing depth below the inversion.

## -J-

**Jurisdiction:** The legal right to control or regulate use of a transportation facility. Jurisdiction requires authority, but not necessarily ownership.

## -K-

**Key Linkage Areas:** Key linkage areas provide landscape connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas where intervening areas of non-lynx habitat such as basins, valleys, agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between two blocks.

## -L-

**Land Classification:** A process for determining the suitability of public lands for certain types of disposal or lease under the public land laws or for retention under multiple use management.

**Land Use Allocation:** The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

**Land Use Plan:** A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

**Leasable Minerals:** Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, asphalt, sulphur, potassium, and sodium minerals, and oil, gas, and geothermal.

**Lease:** (1) A legal document that conveys to an operator the right to drill for oil and gas; (2) the tract of land, on which a lease has been obtained, where producing wells and production equipment are located.

**Lease Stipulation (oil and gas):** Conditions of lease issuance that provide protection for other resource values or land uses by establishing authority for substantial delay or site changes or the denial of operations within the terms of the lease contract. The authorized officer has the authority to relocate, control timing, and impose other mitigation measures under Section 6 of the Standard Lease Form. Lease stipulations clarify the Bureau's intent to protect know resources or resource values.

**Lessee:** A person or entity holding record title in a lease issued by the United States (see 43 CFR 3160.0-5).

**Lek:** An assembly area where birds, especially sage grouse, carry on display and courtship behavior.

**Limited Areas or Trails:** Designated areas or trails where the use of off-road vehicles is subject to restrictions, such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

**Limits of Acceptable Change:** A framework for establishing acceptable and appropriate resource and social conditions in recreation settings. A system of management planning.

**Litter:** The uppermost layer of organic debris on the soil surface, essentially the freshly fallen or slightly decomposed vegetal material.

**Loamy:** Intermediate in texture and properties between fine- and coarse-textured soils.

**Locatable Minerals:** Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

**Lode:** A mineral deposit in solid rock.

**Lode Mining:** Mining of a mineral deposit in solid rock.

**Lynx Analysis Unit (LAU):** The LAU is a project analysis unit upon which direct, indirect, and cumulative effects analyses are performed. LAU boundaries should remain constant to facilitate planning and allow effective monitoring of habitat changes over time. An area of at least the size used by an individual lynx, about 25-50 square miles.

**Lynx Habitat:** Lynx occur in mesic coniferous forest that have cold, snowy winters and provide a prey base of snowshoe hare. In the Rocky Mountains primary vegetation that contributes to lynx habitat is lodgepole pine, subalpine fir, and Englemann spruce. Secondary vegetation that, when interspersed within subalpine forests, may also contribute to lynx habitat, includes cool, moist Douglas-fir, grand fir, western larch, and aspen forest. Dry forest types (ponderosa pine, climax lodgepole pine) do not provide lynx habitat. Primary elevations for lynx habitat are between 1500-2000 m. (4,920 – 6,560 ft.) elevation zones in the northern Rockies.

-M-

**Management Decision:** A decision made by the BLM to manage public lands. Management decisions include both land use plan decisions and implementation decisions.

**Management Framework Plan:** Planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of the FLPMA, which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, and objectives to be achieved for each class of land use or protection.

**Management Opportunities:** A component of the analysis of the management situation; actions or management direc-

tions that could be taken to resolve issues or management concerns.

**Metalliferous:** Metallic minerals such as gold, silver, and lead.

**Metamorphic Rock:** Any rock derived from preexisting rocks by mineralogical, chemical, and structural changes, essentially in the solid state, in response to marked changes in temperature, pressure, shearing stress, and chemical environment at depth in the earth's crust.

**Mill:** A plant in which ore is treated for the recovery of valuable minerals or valuable minerals are concentrated into a smaller bulk for shipping to a smelter or other reduction works.

**Mill site (Millsite claim):** A site located on nonmineral land and used for erecting a mill or reduction works, or for other uses reasonably incident to support of a mine. Millsites are limited to 5 acres and may be located either by metes and bounds or by legal subdivision.

**Mine:** An opening or excavation in the earth for extracting minerals.

**Mineral:** Any solid or fluid inorganic substance that can be extracted from the earth for profit.

**Mineral Entry:** The filing of a claim on public land to obtain the right to any minerals it may contain.

**Mineral Estate:** The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

**Mineral Materials:** Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay, that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

**Mineral Withdrawal:** A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims) and development.

**Minimize:** To reduce the adverse impact of an operation to the lowest practical level.

**Mining Claim:** A parcel of land that a miner takes and holds for mining purposes, having acquired the right of possession by complying with the Mining Law and local laws and rules. A single mining claim may contain as many adjoining locations as the locator may make or buy. There are four categories of mining claims: lode, placer, millsite, and tunnel site.

**Mining District:** An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

**Mitigation Measures:** Methods or procedures that reduce or lessen the impacts of an action.

**Monitoring:** The periodic observation and orderly collection of data on 1) changing conditions of public land related to management actions and 2) the effects of implementing decisions.

**Modification:** A change in a Plan of Operations that requires some level of review by BLM because it exceeds what was described in the approved Plan of Operations.

**Modification (oil and gas):** A change to the provision of a lease stipulation either temporarily or for the term of the lease.

**Monitoring Plan:** the process of tracking the implementation of land use plan decisions.

**Multiple Use:** The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.

-N-

**National Ambient Air Quality Standards:** The allowable concentrations of air pollutants in the ambient (public outdoor) air. National ambient air quality standards are based on the air quality criteria and divided into primary standards (allowing an adequate margin of safety to protect the public health) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including (but not limited to) effects on soils, water, crops, vegetation, human-made materials, animals, wildlife, weather, visibility, climate, and hazards to transporta-

tion, as well as effects on economic values and on personal comfort and well-being.

**National Environmental Policy Act (NEPA) of 1969:** An Act that encourages productive and enjoyable harmony between man and his environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches the understanding or the ecological systems and natural resources important to the Nation, and establishes the Council on Environmental Quality.

**National Landscape Conservation System:** A system of Congressional, Presidential, or other designated areas managed by the BLM, the components of which include National Monuments, National Conservation Areas, Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Historic Trails, National Scenic Trails, the California Desert Conservation Area, and the Headwaters Forest Reserve.

**National Register of Historic Places:** A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology and culture, established by the "Historic Preservation Act" of 1966 and maintained by the Secretary of the Interior.

**National Wild and Scenic Rivers System:** A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

**Neotropical Migratory Birds:** Birds that travel to Central America, South America, the Caribbean, and Mexico during the fall to spend the winter and then return to the United States and Canada during the spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.

**No Surface Occupancy:** A fluid minerals leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the area.

**Non-metalliferous:** Non-metallic minerals such as fluorspar, asbestos, and mica.

**Notice:** The notification a mining operator must submit to BLM of the intention to begin an operation that will disturb 5 acres or less a year within a mining claim or project area. The intent of a Notice is to permit operations with limited geographic disturbance to begin after a quick review for potential resource conflicts and to eliminate the need for federal action. A Notice requires no special forms, but an operator must submit specific information. BLM must complete its review of the Notice within 15 calendar days of its receipt unless more information is needed to determine if the operation would cause unnecessary or undue degradation.

**Noxious Weeds:** A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

**Nutrient Cycling:** The circulation of chemical elements such as nitrogen, oxygen, carbon, and phosphorus in specific pathways from the abiotic (not involving or produced by organisms) portions of the environment into organic substances in plants and animals and then back into abiotic forms.

-O-

**Objective:** A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

**Open:** Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

**Obligate:** Essential, necessary, unable to exist in any other state, mode, or relationship.

**Off-Highway Vehicle (off-road vehicle):** Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) Any nonamphibious registered motorboat; (2) Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) Vehicles in official use; and (5) Any combat or combat support vehicle when used in times of national defense emergencies.

**Open Areas and Trails:** Designated areas and trails where off-road vehicles may be operated, subject to operating regu-

lations and vehicle standards or an area where all types of vehicle use is permitted at all times, subject to standards.

**Open Pit Mining:** A surface mining method in which overlying rock and soil are removed to expose an ore body, which is then drilled, blasted, and hauled from the pit.

**Operator:** Any person who has taken formal responsibility for the operations conducted on the leased lands.

**Ore:** A mineral deposit of high enough quality to be mined at a profit.

**Outstanding:** 1. Standing out among others of its kind; conspicuous; prominent; 2. superior to others of its kind; distinguished; excellent.

**Outstandingly Remarkable (River) Values:** Values among those listed in Section 1(b) of the Wild and Scenic Rivers Act are "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values. . . ." Other similar values which may be considered include botanical, hydrological, paleontological, or scientific. Professional judgment is used to determine whether values exist to an outstandingly remarkable degree.

**Overstory:** The layer of foliage in a forest canopy.

-P-

**Paleontological Resources (Fossils):** The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

**Paleontology:** A science dealing with the life forms of past geological periods as known from fossil remains.

**Parent Material (Soil):** The unconsolidated more or less chemically weathered mineral or organic matter from which the upper level of the soil profile has developed.

**Patent:** The instrument by which the Federal Government conveys title to the public lands.

**Perennial Stream:** A stream that flows continuously during all seasons of the year.

**Permitted Use:** The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease. Expressed in AUMs.

**Permittee:** Holder of a valid permit that authorizes certain uses of the public lands (e.g., for grazing).

**Petroglyph:** A figure, design, or indentation carved, abraded, or pecked into a rock.

**pH:** A measure of acidity or hydrogen ion activity. Neutral is pH 7.0. All values below 7.0 are acidic, and all values above 7.0 are alkaline.

**Pictograph:** A figure or design painted onto a rock.

**Placer:** An alluvial deposit of sand and gravel containing valuable minerals such as gold.

**Placer Deposit:** A mass of gravel, sand, or similar material resulting from the crumbling and erosion of solid rocks containing particles of gold or other valuable minerals that have been derived from rocks or veins.

**Placer Mining:** A method of mining in which the overburden is removed to expose gold-bearing gravel deposits beneath. The gravel is then sluiced to separate the gold.

**Plan:** A document that contains a set of comprehensive, long range decisions concerning the use and management of Bureau administered resources in a specific geographic area.

**Planning Area:** A geographical area for which land use and resource management plans are developed and maintained.

**Planning Criteria:** The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

**Planning Decision (land use plan decision):** establishes desired outcomes and actions needed to achieve them. Decisions are reached using the BLM planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

**Pleistocene Megafauna:** Large mammals that inhabited North America before the end of the last glaciation and that became extinct. Such animals include the mammoth, mastodon, camel, giant sloth, Bison antiquus, and Bison occidentalis.

**Population:** Within a species, a distinct group of individuals that tend to mate only with members of the group. Because of generations of inbreeding, members of a population tend to have similar genetic characteristics.

**Potential Natural Vegetation:** The vegetation that would become established if all successional sequences were com-

pleted without interferences by man under the present environmental conditions.

**Precambrian:** Pertaining to the earliest era of geological history, extending from 4.5 billion to 540 million years ago and encompassing 7/8 of the earth's history. Just before the end of the Precambrian, complex multicellular organisms, including animals, evolved.

**Precious Metal:** A general term for gold, silver, or any of the minerals of the platinum group.

**Pre-commercial thinning:** A thinning that does not yield trees of commercial value, usually designed to reduce stocking in order to concentrate growth on the more desirable trees.

**Prehistoric:** Refers to the period wherein Native American cultural activities took place which were not yet influenced by contact with historic nonnative culture(s).

**Prescribed Fire:** The introduction of fire to an area under regulated conditions for specific management purposes.

**Prevention of Significant Deterioration:** A regulatory program based not on the absolute levels of pollution allowable in the atmosphere but on the amount by which a legally defined baseline condition will be allowed to deteriorate in a given area. Under this program, geographic areas are divided into three classes, each allowing different increases in nitrogen dioxide, particulate matter, and sulfur dioxide concentrations.

**Prey Base:** Populations and types of prey species available to predators.

**Primitive and Unconfined Recreation:** Non-motorized, non-mechanized and undeveloped types of recreational activities.

**Project Plan:** Detailed survey and design plan.

**Project Area:** The area of land upon which an operator conducts mining operations, including the area needed for building or maintaining of roads, transmission lines, pipelines, or other means of access.

**Protest:** Application for review by a higher administrative level.

**Public Land:** Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf, and land held for the benefit of Indians, Aleuts, and Eskimos.

## -Q-

**Quarry:** An open or surface working, usually for the extraction of stone, slate, limestone, etc.

**Quarry Site:** Place where minerals occur which were a source of raw material for prehistoric/historic industries.

## -R-

**Rangeland:** Land used for grazing by livestock and big game animals on which vegetation is dominated by grasses, grass-like plants, forbs, or shrubs.

**Raptor:** Bird of prey with sharp talons and strongly curved beaks such as hawks, owls, vultures, and eagles.

**Reasonably Foreseeable Development Scenario:** The prediction of the type and amount of oil and gas activity that would occur in a given area. The prediction is based on geologic factors, past history of drilling, projected demand for oil and gas, and industry interest.

**Reclamation:** The process of converting disturbed land to its former use or other productive uses.

**Record of Decision:** A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.

**Relict:** A remnant or fragment of the vegetation of an area that remains from a former period when the vegetation was more widely distributed.

**Reserves (mineral):** Known mineral deposits that are recoverable under present conditions but are as yet undeveloped.

**Reservoir (oil and gas):** A naturally occurring, underground container of oil and gas, usually formed by deformation of strata and changes in porosity.

**Resource Advisory Council:** A council established by the Secretary of the Interior to provide advice or recommendations to BLM management.

**Resource Management Plan:** A land use plan as prescribed by the Federal Land Policy and Management Act which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives and actions to be achieved.

**Resource Reserve Allotment:** A unit of public land that will not have term grazing permits issued. Such an allotment would only be grazed on a temporary nonrenewable basis. The use of these allotments would be to provide temporary grazing to rest other areas following wildfire, habitat treat-

ments, or to allow for more rapid attainment of rangeland health. The allotment must be of sufficient size to be managed as a discrete unit. Resource Reserve Allotments should be distributed throughout the planning area.

**Retort:** A vessel used for the distillation of volatile materials.

**Revision:** The process of completely rewriting the land use plan due to changes in the planning area affecting major portions of the plan or the entire plan.

**Right-of-way:** A permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc.; also, the lands covered by such an easement or permit.

**Right-of-way Corridor:** A parcel of land that has been identified by law, Secretarial order, through a land use plan or by other management decision as being the preferred location for existing and future right-of-way grants and suitable to accommodate one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

**Riparian Area:** A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and dependent on free water in the soil.

**River Designation:** The process whereby rivers are added to the National Wild and Scenic Rivers System by an act of Congress or by administrative action of the Secretary of the Interior with regard to state-designated rivers under Section 2(a)(ii) of the Wild and Scenic Rivers Act.

**Roadless:** Refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

**Rock Art:** Petroglyphs or pictographs.

**Runoff:** The water that flows on the land surface from an area in response to rainfall or snowmelt.

## -S-

**Saleable Minerals:** Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

**Saline:** Containing high concentrations of salt.

**Salmonid:** Any fish of the Salmonidae family, including salmon and trout.

**Scale:** Refers to the geographic area and data resolution under examination in an assessment or planning effort.

**Scenic Quality:** The degree of harmony, contrast and variety within a landscape.

**Scenic River:** A river or section of a river that is free of impoundments and whose shorelines are largely undeveloped but accessible in places by roads.

**Scoping:** The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

**Seasonal Restriction:** A fluid minerals leasing constraint that prohibits surface use during specified time periods to protect identified resource values. The constraint does not apply to the operation and maintenance of production facilities unless analysis demonstrates that such constraints are needed and that less stringent, project-specific constraints would be insufficient.

**Section 7 Consultation:** The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

**Section 106 Compliance:** The requirement of Section 106 of the National Historic Preservation Act that any project funded, licensed, permitted, or assisted by the Federal Government be reviewed for impacts to significant historic properties and that the State Historic Preservation Officer and the Advisory Council on Historic Preservation be allowed to comment on a project.

**Sediment Yield:** The amount of sediment produced in a watershed, expressed in tons, acre feet, or cubic yards, of sediment per unit of drainage area per year.

**Sediment:** Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

**Sedimentary Rock:** Rock resulting from consolidation of loose sediment that has accumulated in layers.

**Sedimentation:** The process or action of depositing sediment.

**Segregation:** Any act such as a withdrawal or exchange that suspends the operation of the public land laws.

**Sensitive Species:** All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the Fish and Wildlife Service and National Marine Fisheries Service.

**Seral:** Pertaining to the successional stages of biotic communities.

**Shaft:** A vertical or inclined opening to an underground mine.

**Shrub:** A low, woody plant, usually with several stems, that may provide food and/or cover for animals.

**Significant:** An effect that is analyzed in the context of the proposed action to determine the degree or magnitude of importance of the effect, either beneficial or adverse. The degree of significance can be related to other actions with individually insignificant but cumulatively significant impacts.

**Slash:** The branches, bark, tops, cull logs and broken or uprooted trees left on the ground after logging.

**Slope:** The degree of deviation of a surface from the horizontal.

**Sluiced:** Refers to a mining method that uses a long, inclined trough or launder containing in its bottom, riffles that provide a lodging place for heavy minerals in ore concentration. The material to be concentrated is carried down through the sluices on a current of water. Sluice boxes are widely used in placer operations for concentrating such minerals as gold and platinum from stream gravels.

**Social Science:** The study of society and of individual relationships in and to society, generally including one or more of the academic disciplines of sociology, economics, political science, geography, history, anthropology, and psychology.

**Soil Productivity:** The capacity of a soil to produce a plant or sequence of plants under a system of management.

**Soil Texture:** The relative proportions of the three size groups of soil grains (sand, silt, and clay) in a mass of soil.

**Solitude:** (1) the state of being alone or remote from others; isolation; (2) a lonely or secluded place.

**Source Water Delineation and Assessment Reports:** Major component of the Montana Source Water Protection Plan

defining Source Water Protection Areas. The reports attempt to delineate an inventory zone whose size and areal extent are determined by the type of water source, susceptibility to contamination, and characteristics of the aquifer, including flow characteristics of the groundwater.

**Source Water Protection Plan:** A management plan, usually developed by local communities, that addresses public water system concerns based on information contained within Source Water Delineation and Assessment Reports.

**Spawning Gravels:** Stream-bottom gravels where fish deposit and fertilize their eggs. The covering of these gravels with silt can block the supply of oxygen to the eggs or serve as a cementing agent to prevent fry from emerging.

**Special Recreation Management Area:** Areas which require explicit recreation management to achieve recreation objectives and provide specific recreation opportunities.

**Special Status Species:** Includes proposed species, listed species, and candidate species under the ESA; State-listed species; and BLM State Director-designated sensitive species (see BLM Manual 6840 - Special Status Species Policy).

**Species Diversity:** The number, different kinds of, and relative abundances of species present in a given area.

**Standard:** A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (e.g., land health standards).

**Stipulations:** Requirements that are part of the terms of a mineral lease. Some stipulations are standard on all Federal leases. Other stipulations may be applied to the lease at the discretion of the surface management agency to protect valuable surface resources and uses.

**Strategic Plan:** A plan that establishes the overall direction for the BLM. This plan is guided by the requirements of the Government Performance and Results Act of 1993, covers a 5-year period, and is updated every 3 years. It is consistent with FLPMA and other laws affecting the public lands.

**Stratigraphy:** The arrangement of strata, especially as to geographic position and chronologic order of sequence.

**Stream Reach:** A specified length of a stream or channel.

**Structure (Stream Channel):** Any object, usually large, in a stream channel that controls water movement.

**Structure (of forest vegetation):** The horizontal and vertical distribution of plants in a stand, including height, diameter, crown layers, and stems of trees, shrubs, herbaceous understory, snags and coarse woody debris.

**Substrate:** The mineral or organic material that forms the bed of a stream; the base upon which an organism lives; the surface on which a plant or animal grows or is attached.

**Substrate Embeddedness:** An estimate of the surface area of the large substrate types that are covered with fine substrate particles (< 2mm diameter).

**Sustainability:** The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

**Sustained Yield:** Maintenance of an annual or regular periodic output of a renewable resource from public land consistent with the principles of multiple use.

-T-

**Tailings:** The waste matter from ore after the extraction of economically recoverable metals and minerals.

**Take:** As defined by the Endangered Species Act, "to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect, or attempt to engage in any such conduct."

**Terms and Conditions:** Measures contained in livestock grazing permits and leases, which are determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the BLM, and to ensure conformance with Fundamentals of rangeland health and Standards and guidelines for grazing administration.

**Terrestrial Species:** Ground-dwelling plants and animals.

**Thermal Cover:** Vegetation or topography that prevents radiational heat loss, reduces wind chill during cold weather, and intercepts solar radiation during warm weather.

**Threatened Species:** Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the Federal Register.

**Thrust Fault:** A reverse fault that is characterized by a low angle of inclination with reference to a horizontal plane.

**Timber Database:** Commercial forestland judged to be environmentally and economically suitable and available for the continuous production of timber; the land from which the allowable cut is calculated and harvested.

**Tools:** Something that helps to accomplish the stated goal or action for a resource/resource use or program. Tools include: timing, duration of grazing, forage utilization, grazing rotation, deferment of grazing, stubble height, bank alteration, and structural features.

**Total Maximum Daily Load:** An estimate of the total quantity of pollutants (from all sources: point, nonpoint, and natural) that may be allowed into waters without exceeding applicable water quality criteria.

**Traditional Lifeway Values:** Values that are important for maintaining a group's traditional system of religious belief, cultural practice, or social interaction. A group's shared traditional lifeway values are abstract, nonmaterial, ascribed ideas that cannot be discovered except through discussions with members of the group. These values may or may not be closely associated with definite locations. Traditional lifeway values sometimes imbue cultural resources with significance. They can be identified through consultation and considered through public participation during planning and environmental review. The BLM does not manage people's values, beliefs, or social systems.

**Tundra:** Treeless arctic and alpine areas where cover may consist of bare ground, grasses, sedges, forbs, dwarf shrubs, mosses, or lichens.

-U-

**Ungulates:** Hoofed animals, including ruminants but also horses, tapirs, elephants, rhinoceroses, and swine.

**Uplands:** Lands at higher elevations than alluvial plains or low stream terraces; all lands outside the riparian-wetland and aquatic zones.

**User Day:** Any calendar day, or portion thereof, for each individual accompanied or serviced by an operator or permittee on the public lands or related waters; synonymous with passenger day or participant day.

**Utilization (rangeland):** The proportion of the current year's forage production that is consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

-V-

**Valid Existing Rights:** Locatable mineral development rights that existed when the Federal Land Policy and Management Act was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located in segregated lands requires BLM to conduct a validity examination and is called a "valid existing rights" determination.

**Vegetation Community:** An assemblage of plant populations in a common spatial arrangement.

**Vegetation Manipulation:** Alteration of vegetation by using fire, plowing, or other means.

**Vegetation Type:** A plant community with distinguishable characteristics described by the dominant vegetation present.

**Vein:** A well-defined, typically tabular zone or belt of mineral-bearing rock confined between nonmineralized rock.

**Viable:** Capable of sustaining a healthy and reproducing population over a long period of time.

**Visual Resources:** The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

-W-

**Waiver (oil and gas):** A permanent exemption to a lease stipulation.

**Waste Rock:** Barren rock at a mine or material that is too low in grade to be of economic value.

**Water Quality:** The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

**Water Quality Restoration Plans:** A comprehensive plan developed in conjunction with MTDEQ, local watershed groups, and numerous agencies and entities to address and establish water quality goals, Total Maximum Daily Loads, restoration strategies, and monitoring.

**Water Table:** The surface in a groundwater body where the water pressure is atmospheric. It is the level at which water stands in a well that penetrates the water body just far enough to hold standing water.

**Watershed:** A geomorphic area of land and water within the confines of a drainage divide. The total area above a given point on a stream that contributes flow at that point.

**Wetlands:** Areas that are inundated or saturated by surface or ground water often and long enough to support and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wild Horses and Burros:** All unbranded and unclaimed horses and burros using public lands as all or part of their habitat.

**Wild, Scenic or Recreational River:** The three classes of what is traditionally referred to as a "Wild and Scenic River." Designated river segments are classified as wild, scenic and/or recreational, but the segments cannot overlap.

**Wild and Scenic Study River:** Rivers identified in Section 5 of the Wild and Scenic Rivers Act for study as potential additions to the National Wild and Scenic Rivers System. The rivers shall be studied under the provisions of Section 4 of the Wild and Scenic Rivers Act.

**Wild River:** Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**Wildcat, or Exploration, Well:** A well drilled in the area where there is no oil or gas production.

**Wilderness Characteristics:** Key characteristics of a wilderness listed in section 2(c) of the “Wilderness Act” of 1964 and used by BLM in its wilderness inventory. These characteristics include size, naturalness, outstanding opportunities for solitude, outstanding opportunities for primitive and unconfined type of recreation, and special features.

**Wilderness Study Area:** A designation made through the land use planning process of a roadless area found to have wilderness characteristics as described in Section 2 (c) of the Wilderness Act of 1964.

**Wilderness:** A congressionally designated area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, that is protected and managed to preserve its natural conditions and that (1) generally appears to have been affected mainly by the forces of nature, with human imprints

substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres or is large enough to make practical its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

**Wildfire:** Any unwanted wildland fire.

**Wildland Fire:** Any nonstructure fire, other than prescribed fire, that occurs in the wildland.

**Wildland Fire Situation Analysis:** A decision-making process that evaluates alternative management strategies against selected safety, environmental, social, economical, political, and resource management objectives as selection criteria.

**Wildland Urban Interface (WUI):** The line, area or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels.

**Winter Range:** Range that is grazed during winter.

**Withdrawal:** An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

**Woodland:** A forest community occupied primarily by non-commercial species such as juniper, mountain mahogany, or quaking aspen groves; all western juniper forest lands are classified as woodlands, since juniper is classified as a noncommercial species.